

THE
GEORGE WASHINGTON UNIVERSITY
NAVY GRADUATE COMPTROLLERSHIP PROGRAM

COMPTROLLERSHIP AND ACCOUNTING - A CONTRACT

by

Howard P. Robinson
Captain, U. S. Marine Corps

for

Dr. A. Rex Johnson

May, 1955

PREFACE

The function of Comptrollership is a relatively new and rapidly expanding field in the area of Business Administration. There is a wide range of opinion concerning the relationship between Comptrollership and the field of Accounting.

In the September, 1953 issue of The Controller, Mr. James L. Pierce, Vice-President and Controller of the A.B. Dick Company, presented his views on the relationship between Comptrollership and Accounting in an article entitled, "Controllership and Accounting: A Contrast". It was this article that gave rise to the subject of this term paper. The concept expressed in this paper is one that developed in the writer's mind during the course of the 1954-55 Navy Graduate Comptrollership Program, tempered, to be sure, by the writer's background in Accounting.

The writer is indebted to First Lieutenant Gerald H. Polakoff, U.S. Marine Corps, for his assistance in proof-reading the manuscript copy, and to Mrs. J. Kramer for the typing of the final draft.

Howard P. Robinson

May, 1955

Captain, U.S. Marine Corps

COMPTROLLERSHIP AND ACCOUNTING - A CONTRACT

	Page
PREFACE.	ii
LIST OF ILLUSTRATIONS.	iv
Chapter	
I. INTRODUCTION...	1
II. THE NATURE OF ACCOUNTING.	3
III. Historical Development The Function of Accounting	
III. THE NATURE OF COMPTROLLERSHIP.	9
Historical Development The Function of Comptrollership	
IV. THE COMPTROLLER'S RESPONSIBILITIES TO MANAGEMENT.	17
Control of Operations Through Accounting Control of Assets Through Accounting Office Management Procedures	
V. SUMMARY.	24
From Accountant to Comptroller The Comptroller--His Function in Top Management	
BIBLIOGRAPHY.	28

LIST OF ILLUSTRATIONS

Figure		Page
1.	What is Controllershship.	13
2.	Typical Comptroller's Department Organization.	16

Chapter I

INTRODUCTION

"Modern controllers are no longer record-keepers but businessmen who combine active participation in policy decisions with the planning and over-all supervision of control."
Glenn A. Welsch¹

A wide range of opinion exists today as to the relationship between Comptrollership and Accounting. At one extreme are those who contend that Comptrollership and Accounting are but one Art; while at the other extreme there are those who contend that Comptrollership and Accounting are two separate and distinct arts. It is this writer's thesis that where successful business management exists there exists concurrently an inseparable union of Comptrollership and Accountancy. The ideas expressed will be directed toward showing the development of these two arts and toward showing their inseparable functioning--the one, Accounting, being the basis of the other, Comptrollership. This writer does not mean to infer that to be a Comptroller one must first be an accomplished Accountant. This writer does believe, however, that a successful Comptroller must have a sound understanding of Accountancy and of how it is used as an arm of effective management.

Although the current trend in terminology is toward the use of the term "Controllership" as opposed to "Comptrollership", the latter term will be used throughout this paper. Such use is based on one factor--the personal preference of

¹Glenn A. Welsch, "The Controller's Function in Top Management", The Journal of Accountancy, XCVII (July, 1954), 66.

"The purpose of this book is to provide a comprehensive overview of the current state of research in the field of artificial intelligence. It covers a wide range of topics, from the foundations of AI to the latest developments in machine learning and deep learning. The book is intended for students, researchers, and practitioners in the field of AI."

The book is organized into several chapters, each focusing on a specific area of AI. Chapter 1 introduces the field of AI and discusses its history and current state. Chapter 2 covers the foundations of AI, including logic, set theory, and probability. Chapter 3 discusses the various applications of AI, such as natural language processing, computer vision, and robotics. Chapter 4 focuses on machine learning, which is a subset of AI that allows computers to learn from data. Chapter 5 discusses deep learning, which is a type of machine learning that uses neural networks to process data. Chapter 6 covers the ethical implications of AI, such as privacy, security, and bias. Chapter 7 discusses the future of AI and the challenges that lie ahead. The book concludes with a summary of the key points discussed in each chapter.

Throughout the book, the author provides a clear and concise explanation of the concepts and techniques discussed. The book is well-organized and easy to read, making it a valuable resource for anyone interested in AI. The book is also up-to-date, covering the latest developments in the field of AI.

John D. Schumaker, "The Foundations of Artificial Intelligence," 1980, MIT Press.

this writer. It is felt that the term "Comptrollership" alleviates somewhat the stigma usually associated with the term "Control". The two terms, however, are synonymous. The fields of Comptrollership and Accounting will also be referred to as "Arts" rather than as "Sciences". There are good discussions on this point in current business literature. For the purposes of this paper, suffice to say that this writer subscribes to the school of thought that believes that the term "Science" should be reserved for the more exact physical sciences, while the term "Art" is much more appropriate for the fields of Comptrollership, Accounting, and the other areas of Business Administration.

Chapter II

THE NATURE OF ACCOUNTING

"One of the chief aids to management in making its efforts fully productive is modern accounting."

Heckert and Wilson¹

Historical Development

The year 1492 A.D. is perhaps the best point in history to use as a reference mark in considering the development of the art of accounting. It was in that year that Christopher Columbus made his first voyage to the New World, and it was about that time that Paciolo was preparing his text on Mathematics and Bookkeeping. In 1494, Luca Paciolo, a Franciscan Monk, published the first printed text in the field of Mathematics and Bookkeeping. His text was entitled Summa de Arithmetica, Geometria, Proportioni, et Proportionaliti (Everything that is known about Arithmetic, Geometry, and Proportion). In it, he included a tractate entitled De Computis et Scripturis (Concerning Accounting and Recording).

Paciolo's text was not, however, the first example of business records, nor was it the first example of Double-Entry Bookkeeping, manuscripts on the subject had been in existence for some time. Babylonian clay tablets, with records in cuneiform, have been found that record salary payments about 2300 B.C. Records of Banking and Money Lenders that originated between 1000 and 500 B.C. have been discovered, as have records of loans with interest and the dissolution of partnerships

¹J. Brooks Heckert and James D. Wilson, Controllership (New York: The Ronald Press Company, 1952), p.4.

during the 5th and 6th centuries B.C. Early Egyptian records on papyrus recorded the assessment and collection of taxes, the revenues and expenditures of governmental units, and the operations of a merchandising establishment in which one official checked the records of another. Examples of a form of Double-Entry records date back to 1211 A.D., when Banking records in Florence, Italy, carried debits to a depositor's account on one page and credits to the account on an adjacent page. About 1340 A.D., ledgers showing transactions involving charges to expense accounts, credits to income accounts, and entries transferring the balances of these accounts to a Profit and Loss Account appeared in Genoa, Italy.

The evolution and growth of Double-Entry Bookkeeping resulted largely from the efforts of Traders and Money Lenders to make records that would help them to better manage their business affairs. As trade and business increased during the Renaissance this need became even greater and the use of Double-Entry Bookkeeping spread. By the 16th Century, Italian Accounting methods had spread throughout Europe. Prior to this, a very different system of Bookkeeping had existed in England. This system can be classified as the "Agency" system--that is: the reporting party charges himself with responsibility on one side (debit) of an account and discharges himself from responsibility on the other side (credit). The essential ideas of this method became a part of legal procedure though, and have been transmitted to the present time in the Charge and Discharge reporting used in Fiduciary Accounting. By the 17th Century, Western Europe had begun to modify

the Italian methods. The basic procedures and ideas remained much the same, as we know them today, but terminology, ledgers, and journals were improved. This period also saw the development of many rules to guide students in analyzing and recording transactions, and Financial Statements began to appear. The 18th Century saw little change in technique but did see a geographical expansion as the Industrial Revolution began. It was the Industrial Revolution that foretold the coming requirements of businessmen for the information and assistance that accounting could provide.

The 19th Century saw an extensive growth of business corporations in both Great Britain and the United States. With this growth came an increased public holding of investment securities and the impetus that expanded the mechanics of Bookkeeping into the Art of Accounting. The needs of management for a means of production control produced Cost Accounting during this period, and the need to protect the investing public produced external auditing. During the period 1844-1870, the British Parliament passed laws authorizing and encouraging stock companies. Among the provisions of these laws, known as Company Acts, was the requirement that Annual Balance Sheets be sent to stockholders, after the accounts had been examined by an auditor. This requirement was one of the principal factors that occasioned the rise of professional accounting societies.

The first of these professional societies appeared in Scotland in 1854 and in England about 1870. By the end of the Century, the term "Chartered Accountant" had become

known throughout the world. The American Association of Public Accountants was organized in New York in 1886 and chartered the following year by the state. New York passed the first state law creating the title of Certified Public Accountant in 1896. By 1922, the Legislative Bodies of all forty-eight states and the District of Columbia had recognized Certified Public Accountants, and the Uniform Certified Public Accountant Examinations were being administered under these different laws. The Federal Reserve Act of 1913 gave new support to the extensive use of commercial paper. Out of this came an increased desire for independent scrutiny of the accuracy of financial statements and of the accounts behind them. To satisfy this desire, professional accountants developed the Balance Sheet Audit.

With the development of industrial mass production and product competition after 1900, the areas of Cost Accounting, Internal Control and Auditing, and Budgeting advanced rapidly to meet the needs of management. The establishment of the Securities and Exchange Commission in 1933-34 acted to extend general acceptance of desirable standards of good financial reporting. World War II gave impetus to accounting development through cost and profit controls and the complexity of wartime taxation. Since the end of World War II, the greatest development has been the adoption of commercial accounting procedures by many government agencies.

The Function of Accounting

The increasing need of business enterprises over the centuries for a systematic record of financial position and of operations resulted in the development of the Art of Accounting as we know it today. One of the most concise statements of the function of accounting is the definition provided by the Committee on Terminology of the American Institute of Accountants. This Committee defines Accounting in the following manner:

Accounting is the art of recording, classifying and summarizing in a significant manner and in terms of money, transactions and events which are, in part at least, of a financial character, and interpreting the results thereof.²

While the statement above is a good concise definition of accounting, it does not fully describe the functions that accounting performs for management. In addition to providing a systematic record of financial position and of the profits and losses of the business enterprise, accounting serves to accumulate statistical and financial data for the use of management in the determination of policies and in the effective control of business operations. Within recent years this has probably become the most important function of accounting. Management still wants and needs a financial history of the business enterprise, but more than this it needs information that can serve as a guide in planning future operations. Other functions of accounting are to furnish information

²American Institute of Accountants, Accounting Research Bulletin No. 9, Report of Committee on Terminology (New York: American Institute of Accountants, 1941), p.67.

needed in the computation of the various federal, state, and local taxes and to furnish information desired by creditors, investors, courts, and government agencies.

Chapter III

THE NATURE OF COMPTROLLERSHIP

"A business, like an automobile, has to be driven in order to get results."

B.C. Forbes
Forbes Epigrams¹

The role of the Comptroller in modern business is often likened to that of the Navigator. This analogy, even on close scrutiny, is quite valid. A perusal of all the facets will reveal to the imaginative reader many of the factors that gave rise to the development of Comptrollership, in addition to many of the functions that the Comptroller performs for management.

Historical Development

The historical development of the art of comptrollership covers a much shorter period of time than does that of accounting, yet both are based upon the same principal factor--the needs of businessmen for assistance in managing their affairs. The first section of the previous chapter indicated how the needs of businessmen resulted in the evolution of the first simple accounting records. When this occurred, businesses were simple operations, in which responsibilities were negligible and the possibility of harm to others, comparatively speaking, was small. Today, business operations are no longer simple, but are of such magnitude and complexity that resultant responsibilities are great and the possibility of harm to others is proportionately increased.

¹As cited by Edmund Fuller in Thesaurus of Quotations (New York: Crown Publishers, 1941), p. 123.

THE HISTORY OF THE UNITED STATES

The history of the United States is a story of the growth of a nation from a small group of colonies to a great power.

1. The early years
2. The American Revolution
3. The early republic

The early years of the United States were marked by the struggle for independence from Britain. The American Revolution was a war for freedom and self-government. The early republic was a time of growth and expansion. The United States became a great power in the world.

THE AMERICAN REVOLUTION

The American Revolution was a war for freedom and self-government. It was fought between the thirteen colonies and Great Britain. The colonies won their independence and became a new nation. The American Revolution was a turning point in the history of the United States. It led to the creation of a new government and the growth of a new nation.

Corresponding to the growth of business and industry has been the increased reliance that management has placed upon the services provided by accountancy for the financial control of operations. From this increasing need of management has come the function of comptrollership. Comptrollership has had a logical and natural development. Somewhere in the development of a business enterprise, a need will be recognized for the function of navigation--that is, a need for assistance in answering the questions of "How are we doing?", "Where can we go?", and "Should we follow this course or that?" When this need is recognized by management, the function of comptrollership will take its place in the operations and organization of the enterprise. The Comptroller will then be more than just the Chief Accountant. He will take his place in top management and will assist and advise the Chief Executive in policy decisions and operational control. It must always be remembered, however, that the function of comptrollership is a staff function and the Comptroller must never move into the area of "line" authority except as he directs the operations of his own department.

The emergence of the role of the Comptroller in American industry has occurred largely since World War I. The office of "comptroller" was established in industry first by the Atchison, Topeka & Santa Fe Railway System in 1880. At that time, however, the functions of the comptroller were limited primarily to the area of finance, with the general auditor being in effect the chief accountant of the company.

The vast majority of early comptrollerships were among the railroad companies and other public utilities. In 1949, Dean J. Hugh Jackson of the Graduate School of Business, Stanford University, conducted a survey of 195 major corporations. Of these companies, 143 had already established the office of comptroller and the average age of these comptrollerships was only twenty-two years. It is interesting to note, however, that the office of comptroller existed in government much earlier than it did in industry. Although the early history of this matter is rather vague, it is known that the office did exist in England during the 14th Century, and the Continental Congress first established the office of comptroller in what is now the United States in 1778.

The Function of Comptrollership

The function of comptrollership in modern industrial management can be defined generally as that of accounting and statistical services, although under close scrutiny it will be found that in many instances this definition is not broad enough. In his text, Executive Development, Dr. John W. Riegel uses the following functional statement as an example of what one particular industrial concern considers to be the function of comptrollership:

As a staff member of management, the Comptroller is charged with advising the President and furnishing functional guidance to the general managers of the Divisions on accounting, auditing, the budget, the preparation and payment of payrolls, tax matters, the compilation of statistics, and office methods and

procedures, and with conduction such activities for the managers of the staff departments.²

Although Dr. Riegel does not indicate the name of the firm that has established the functional statement above as their concept of comptrollership, it is readily discernible that the company has established a decentralized plan of organization, with the corresponding decentralization of control and responsibilities. The areas of the authority of the Comptroller under both centralized and decentralized organization plans will be discussed later in this chapter.

The Controller's Institute of America set forth their concept of the function of the comptroller in September of 1949. This statement of the comptroller's function is included as figure 1, page 13. In it, the Institute divides the comptroller's responsibilities into six general areas. The Institute carefully avoided setting forth specific areas in which the comptroller would function, realizing full well that the exact responsibilities of each comptroller will depend upon the needs of the particular company, its organizational plan, the nature of the business enterprise, and the personalities of the members of the top management team.

Although there are many statements of the function of the comptroller in existence today, they all lead to two points. First, that the function of the comptroller is a staff function--that his mission is to advise and assist

²John W. Riegel, Executive Development (Ann Arbor: University of Michigan Press, 1952), p.84.

Figure 1

WHAT IS CONTROLLERSHIP

The concept of the function of controllership, as developed by Controllers Institute's Committee on Ethics and Eligibility Standards, and approved by the National Board of Directors on September 25, 1949, follows:

1. TO ESTABLISH, COORDINATE AND MAINTAIN, THROUGH AUTHORIZED MANAGEMENT, AN INTEGRATED PLAN FOR THE CONTROL OF OPERATIONS. Such a plan would provide, to the extent required in the business, cost standards, expense budgets, sales forecasts, profit planning, and programs for capital investment and financing, together with the necessary procedures to effectuate the plan.
2. TO MEASURE PERFORMANCE AGAINST APPROVED OPERATING PLANS AND STANDARDS AND TO REPORT AND INTERPRET THE RESULTS OF OPERATIONS TO ALL LEVELS OF MANAGEMENT. This function includes the design, installation and maintenance of accounting and cost systems and records, the determination of accounting policy and the compilation of statistical records as required.
3. TO MEASURE AND REPORT ON THE VALIDITY OF THE OBJECTIVES OF THE BUSINESS AND OF THE EFFECTIVENESS OF ITS POLICIES, ORGANIZATION STRUCTURE AND PROCEDURES IN ATTAINING THOSE OBJECTIVES. This includes consulting with all segments of management responsible for policy or action concerning any phase of the operation of the business as it relates to the performance of this function.
4. TO REPORT TO GOVERNMENT AGENCIES, AS REQUIRED, AND TO SUPERVISE ALL MATTERS RELATING TO TAXES.
5. TO INTERPRET AND REPORT ON THE EFFECT OF EXTERNAL INFLUENCES ON THE ATTAINMENT OF THE OBJECTIVES OF THE BUSINESS. This function includes the continuous appraisal of economic and social forces and of governmental influences as they affect the operations of the business.
6. TO PROVIDE PROTECTION FOR THE ASSETS OF THE BUSINESS. This function includes establishing and maintaining adequate internal control and auditing, and assuring proper insurance coverage.

Source: "The Controller", September 1953, p. 431.

THE UNIVERSITY OF MICHIGAN

The Council of the University of Michigan, in its meeting of November 15, 1957, has approved the following recommendations of the Committee on the University of Michigan, and has directed the Board of Regents to take such action as may be deemed appropriate.

1. To establish a new department of psychology in the College of Arts and Letters, to be headed by Dr. [Name], and to be located in the same building as the existing department of psychology.
2. To establish a new department of sociology in the College of Arts and Letters, to be headed by Dr. [Name], and to be located in the same building as the existing department of sociology.
3. To establish a new department of anthropology in the College of Arts and Letters, to be headed by Dr. [Name], and to be located in the same building as the existing department of anthropology.
4. To establish a new department of political science in the College of Arts and Letters, to be headed by Dr. [Name], and to be located in the same building as the existing department of political science.
5. To establish a new department of economics in the College of Arts and Letters, to be headed by Dr. [Name], and to be located in the same building as the existing department of economics.
6. To establish a new department of history in the College of Arts and Letters, to be headed by Dr. [Name], and to be located in the same building as the existing department of history.
7. To establish a new department of philosophy in the College of Arts and Letters, to be headed by Dr. [Name], and to be located in the same building as the existing department of philosophy.
8. To establish a new department of religion in the College of Arts and Letters, to be headed by Dr. [Name], and to be located in the same building as the existing department of religion.
9. To establish a new department of education in the College of Arts and Letters, to be headed by Dr. [Name], and to be located in the same building as the existing department of education.
10. To establish a new department of psychology in the College of Arts and Letters, to be headed by Dr. [Name], and to be located in the same building as the existing department of psychology.

Approved: The University of Michigan, November 15, 1957.

management in the operation of the business. Second, that while the Comptroller normally is primarily concerned with accounting and the services that it can provide, he is concerned also with statistical services, finance, and quite often management engineering.

The forty-odd speakers from industry that addressed the 1954-55 Navy Graduate Comptrollership Program group presented a generally uniform concept of comptrollership in consonance with the ideas expressed above. A composite picture of their various functions would fit quite well into the functional statement of comptrollership prepared by the Controller's Institute.

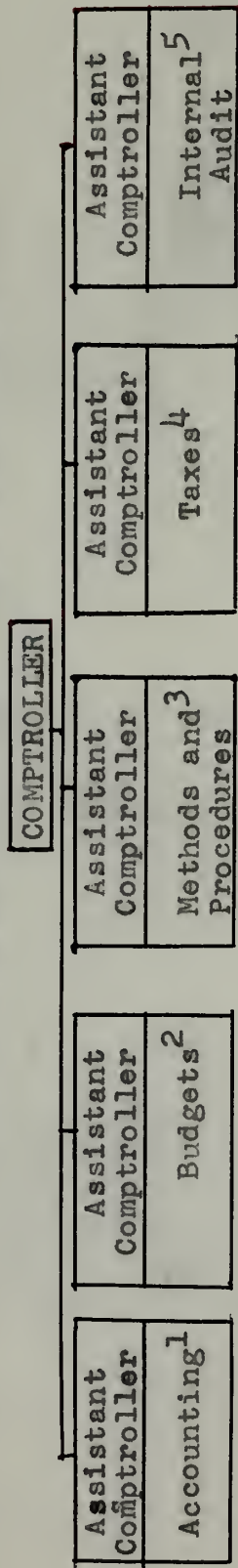
Just as there are variations in the specific functions of the Comptrollers between companies, there is a variation in the place that the Comptroller occupies in the organizational structure. Normally he can be expected to operate at the head of the accounting department, or more comprehensively, the comptroller's department. The trend in business organization today is to place the Comptroller at the second level of the top managerial structure, that is, at the Vice-Presidential level where he reports to the Chief Executive of the company. In some firms, the title of "comptroller" is assigned to the head of the accounting department who reports to a financial executive on the second echelon of authority. This financial executive, usually called the Financial Vice-President, in reality fulfills the function considered by most to be that of the Comptroller.

The organization of the comptroller's department of a large corporation is usually along functional lines. Only in rare cases, where special circumstances demand, will the comptroller's department be organized on the basis of geographical areas or product-lines. A typical organization of a comptroller's department is shown in figure 2, page 16. This organization structure is not to be considered to be that of any particular company, but should be viewed as this writer's concept of an average or composite structure of the functional organization required by a Comptroller.

The relationship of the Comptroller with the accounting departments of the various divisions of a large corporation will depend largely upon the operational plan of the corporation. If the corporation operates under a decentralized plan or organization, then the Comptroller will normally exercise only functional control over the divisional accounting departments--that is: his authority will be limited to that of prescribing accounting methods, systems, procedures, and related matters. If, however, the corporation is operating under a centralized managerial plan, the Comptroller will exercise line control over the divisional or departmental accounting organizations. Under any plan of organization the Comptroller is concerned with assisting top management in the direction of the enterprise through the planning, control, and reporting of current operations; through the protection of assets; through the development and coordination of accounting and managerial methods and procedures; and through the function of internal auditing.

Figure 2.

TYPICAL COMPTROLLER'S DEPARTMENT ORGANIZATION



Footnotes:

1. General Ledger and Cost Accounting; also Cash Receipts and Disbursements when this function is not handled by a Treasurer.
2. Budget Formulation supervision, compilation of Master Budget, and comparative reporting.
3. Accounting Systems, Methods, Procedures, Report Format, and Office Methods when this function is assigned to the Comptroller.
4. All matters relating to Federal, State, and Local taxes as well as reports to Government Agencies.
5. Complete Internal Audit function; responsible only to Comptroller, Chief Executive, and through them to the Board of Directors. Audits should include Management Methods and Procedures in accordance with corporate policy.

Chapter IV

THE COMPTROLLER'S RESPONSIBILITIES TO MANAGEMENT

"....today's decisions determine tomorrow's profits."
Heckert and Wilson¹

It has been noted in preceding chapters that a great deal of variation exists in the specific functions performed by comptrollers in industry. There is, however, a general pattern of functioning that can readily be divided into three broad areas. These areas are: First, the control of operations; second, the control of assets; and, third, office management procedures. These broad areas form the outline that will be used for a discussion of the functions that comptrollers normally perform and of their responsibilities to management.

Control of Operations Through Accounting

The comptroller's responsibilities for the control of operations lie in the areas of planning and reporting. The major factor in this realm is the Budget. The full extent of the comptroller's responsibility for budget preparation will vary somewhat from company to company. Normally, however, the comptroller will prescribe the method, manner, and technique to be followed for the preparation and submission of budget estimates to the Board of Directors, the Finance Committee, or the Chief Executive, as may be required by the particular company.

The format and structure of the budget will depend largely upon the structure of the accounting system, since

¹Heckert and Wilson, op cit, p.267.

the effective use of the budget for control purposes requires that its structure match that of the system of reports that flow from the operating units to top management. The first step in budget formulation that the comptroller will be concerned with is the formulation of the goals or objectives of the business for the budget period. These goals are determined by the "policy-makers" of top management and, tempered by the Economic, Social, and Political forecast, form the basis upon which the budget is built. After the goals of the enterprise are determined, the comptroller will review the past year's operations to consider future changes in financial condition and convert top management's goal into terms of desired profit and sales volume.

With the beginning of the budget period, the comptroller's responsibility for current operations is to measure performance against the financial operating plan--the budget. To satisfactorily fulfill this responsibility, the comptroller must rely almost completely upon accounting reports and methods. Within the accounting system that the comptroller has established for the organization will be a reporting system that will furnish management with the results of operations in financial terms according to lines or areas of responsibility. The budget, as was indicated above, is constructed along the same lines. Among the reports that the comptroller will be concerned with are Sales, Inventory, Purchases, and all Operating Expenses. These

reports are submitted to the comptroller's department in detail and are summarized there for top management's use. The comptroller of a manufacturing concern will also be concerned with the reports of production and cost supplied by the cost accounting system. The comptroller, through members of his department, will analyze these reports of actual performance, compare them with the levels established by the budget, and account for the variance. He will then report the results of his findings to the chief executive and assist the chief executive in making policy decisions that will correct discrepancies.

Control of Assets Through Accounting

The first sector of responsibility for the comptroller in the control of assets is the control of Current Assets--the working capital of the business. Within this area is the control of Cash, Receivables, Securities, and Inventories. The comptroller accomplishes the control of these items through the internal checks and controls that are an integral part of the accounting system. The objectives of the system of internal control includes the promotion of operational efficiency and the encouragement for adherence to managerial policies, as well as the safeguarding and preservation of the assets. In the control of cash and negotiable securities, the comptroller insures that there is a separation of duties and responsibilities that will tend to eliminate the opportunity for fraud and embezzlement, and that there are adequate facilities for the

physical safeguarding of these assets. To insure the safeguarding of inventories, he provides for control measures over purchase authorizations, the acknowledgement of receipt by warehouse personnel, the preparation and payment of vouchers, the maintenance of correct inventory records, and for the protection against loss by proper insurance coverage. In all of these activities, he is concerned with accounting techniques and procedures in carrying out his responsibilities to management.

The second sector of responsibility for the comptroller in the control of assets is the control of Fixed Assets. To control and protect the assets already owned by the business, the comptroller provides for the proper recording of the assets and institutes an adequate depreciation policy. He will also make certain that the assets are protected by adequate insurance coverage. He may be charged with insuring that a reasonable repair policy is followed to prevent the untimely deterioration of the assets. A constant check may be made on this facet of his responsibility through the accounting records by comparing the repair and replacement expenditures with the past experience of the company and with the past experience of the industry in general for the particular type of asset. The comptroller will also provide for the replacement of worn out assets and the acquisition of new assets through the capital expenditures budget. The capital expenditures budget will be formulated on the basis of top management policy and the

anticipated requirements of the business for new assets. It will then be incorporated into the master budget to become a part of the financial operating plan for the budget year.

The comptroller's chief aid in insuring that the various control methods are being followed is the internal audit section of the comptroller's department. This section will constantly review and analyze financial operations to detect fraud, to insure that the various control devices are functioning properly, to see that managerial policies are being adhered to, and to look for areas within the administration of the business that can be improved upon for economy and efficiency.

It is a well accepted point that the internal auditor should be responsible only to a member of top management. In the typical comptroller's organization described in figure 2, page 16, the internal audit department is shown directly under the comptroller. This position of the department is based on two assumptions: One, that the comptroller is on the Vice-Presidential level of the company's organization; and, two, that the comptroller himself is not directly concerned with the record-keeping of the business. Many firms assign the responsibility for the receiving and disbursing of cash and other negotiable instruments to a treasurer who does not report to the comptroller. Strictly from the point of view of internal control, this is a desirable arrangement. From the over-all point of view of operating efficiency, however, such an arrangement is oft-

and the Commission of the European Communities.

It will also be necessary to consider the

possibility of a new system of taxation.

It is also necessary to consider the

possibility of a new system of taxation.

It is also necessary to consider the

possibility of a new system of taxation.

It is also necessary to consider the

possibility of a new system of taxation.

It is also necessary to consider the

possibility of a new system of taxation.

It is also necessary to consider the

possibility of a new system of taxation.

It is also necessary to consider the

possibility of a new system of taxation.

It is also necessary to consider the

possibility of a new system of taxation.

It is also necessary to consider the

possibility of a new system of taxation.

It is also necessary to consider the

possibility of a new system of taxation.

It is also necessary to consider the

possibility of a new system of taxation.

It is also necessary to consider the

possibility of a new system of taxation.

It is also necessary to consider the

possibility of a new system of taxation.

It is also necessary to consider the

not feasible.

The well designed internal audit program will assist the comptroller in the accomplishment of all of his responsibilities. To this end, it will not be limited to just the verification of accounting records and the detection and elimination of fraud, but will encompass a complete management audit program. Such a program will include such checks and inspections as are necessary to determine whether or not managerial administrative policies are being carried out. In this respect, the internal auditor will often find himself in the position of an instructor as he eliminates misunderstandings and ambiguities in administrative policies for operating personnel.

Office Management Procedures

Today's comptroller is usually responsible for the bulk of the administrative work load or "paper-work" of the company. It follows logically that the third broad area of the comptroller's responsibilities is that of office management procedures. Many of the features of this facet of the comptroller's responsibility have been discussed in the preceding pages without identifying them as being within the realm of office management procedures. These are the various features of internal control and accounting procedure. In establishing the system of accounting and internal control for the business, the comptroller must constantly analyze each point of the system to insure that it is necessary and economically feasible. Over-control, and

its concurrent expense burden, can often become more detrimental to the business than under-control.

The comptroller, through the methods and procedures section of his organization, must constantly review the system of business reports to evaluate the reports being submitted and the procedures involved. It will often be found that a report is being submitted from habit, or from obsolete requirements, rather than from the present needs of management. The comptroller must also revise report format periodically in order that all reports will include just the information required. An excess of figures or verbage only serves to increase the work load and cost burden at all levels of operations. Such an excess does nothing to assist management in the effective operation of the enterprise.

The comptroller should also review office management practices that are outside the strict area of accounting. Such matters include the operations of the stenographic and general clerical departments. A periodic evaluation and reorganization of the services of such departments can be expected to result not only in decreased costs, but also in greater service to the operating units for each dollar spent. The comptroller must never forget that his is a service function and that his basic responsibility is to assist top management in the effective and efficient operation of the business.

Chapter V

SUMMARY

"Them's My Sentiments."

Thackeray,
Vanity Fair¹

There is a wide range of opinion today as to the relationship between Comptrollership and Accounting. It has been this writer's thesis that where a successful business management exists there exists concurrently an inseparable union of Comptrollership and Accountancy.

From Accountant to Comptroller

Early in the history of our civilization, the needs of traders, merchants, and money lenders for records to assist them in the better management of their business affairs brought about the first examples of double-entry bookkeeping. As businesses grew in size and known civilization expanded over the world, double-entry bookkeeping grew and expanded in response to the needs of businessmen. These methods of record keeping saw their greatest early development in Italy, but by the 16th Century had spread throughout Europe. By the 17th Century, Western Europe had begun to modify and improve the system and a uniform set of rules, standards, and procedures began to develop. The first professional accounting societies appeared in Western Europe late in the 19th Century and in America soon afterwards. These societies did much to improve accounting and to gain public acceptance of certified accounting statements and

¹Fuller, op cit., p. 664

CHINESE

There is a large number of Chinese people in the
 Chinese people are very intelligent and hard working.
 They have a long history and a rich culture.
 They are very friendly and hospitable.

CHINESE

There is a large number of Chinese people in the
 Chinese people are very intelligent and hard working.
 They have a long history and a rich culture.
 They are very friendly and hospitable.
 They are very intelligent and hard working.
 They have a long history and a rich culture.
 They are very friendly and hospitable.
 They are very intelligent and hard working.
 They have a long history and a rich culture.
 They are very friendly and hospitable.
 They are very intelligent and hard working.
 They have a long history and a rich culture.
 They are very friendly and hospitable.

records. The continued growth of business and industry brought about Cost Accounting, Internal Control, Auditing, and Commercial Budgeting to assist management in the successful accomplishment of its responsibilities. As the utilization of Accountancy increased, a need for an Accounting and Statistical Executive logically developed. To satisfy this need and to give top management an executive who could function much as a Navigator for the business, the function of Comptrollership evolved.

The position of Comptroller in industry first appeared about 1880, however, it was not until after the close of World War I that the extensive growth in this field began.

In the course of the growth of any large business, a need will be recognized at some time for a member of top management to assume the function of Navigation. That is, for a member of top management to be able to answer questions such as, "Where are we?", "Where have we been?", "Where are we going?", and "Should we follow this course or that?" When this need is recognized, the comptroller as the chief accounting and statistical officer will take his logical place in the organization and operations of the business. This position is that of a member of the top management structure, operating in a staff capacity, to assist and advise the chief executive in the control of the business through financial means.

The Comptroller--His Function in Top Management

The functions performed by comptrollers can be divided into three broad areas. These areas are: First, the control of operations; second, the control of assets; and, third, office management procedures.

The comptroller accomplishes the first two of these functions largely through the methods and techniques of accounting. In the area of operational control, the comptroller is first concerned with commercial budgeting. Through this facet of accounting, he is able to compile the master financial plan for the organization, defined in terms of a common denominator. The comptroller is then able to chart, evaluate, and control operations in accordance with this financial plan through the system of accounting reports that flow from the operating units to top management. Accounting also plays a very important role in the control of assets. The techniques of internal control enable the comptroller to effectively protect the assets of the company. A thorough budget program enables him to plan and provide for the replacement of assets as they are worn out in the course of operations. An effective internal audit program provides the comptroller with a verification of the effectiveness of the entire accounting system and eliminates, to a large degree, the opportunity for fraud and embezzlement.

Since the most of the administrative work of an organization is under the supervision of the comptroller, the third area of the comptroller's responsibility is normally

that of office management procedures. This is a logical assignment of duties, since the greater part of the administrative work will concern some facet of the accounting system.

While the comptroller is the accounting executive of an organization, he must not be limited by the "high desk, green eye-shade, and neat, Spencerian-kept ledger sheet" concept. His point of view must not be bound by the covers of his accounting ledgers. Instead, he must be the accounting executive with a managerial viewpoint. If he is, then he will be a successful comptroller. If he is not, then his accomplishments will be something less than is desired. As was indicated in the first chapter, this writer does not contend that every comptroller must be an accomplished accountant. This writer, firmly believes, however, that if a comptroller is to successfully meet the responsibilities that he has to management, he must have a sound understanding of the Art of Accountancy.

When the nature and functions of Comptrollership and Accounting are compared and analyzed, it is found that they form an inseparable union designed to assist top management in the effective and profitable operation of the business enterprise.

BIBLIOGRAPHY

Books

- Anderson, David R. Practical Controllershship. Chicago: Richard D. Irwin, Inc., 1949.
- Bradshaw, Thornton F. and Hull, Charles C. (ed.). Controllershship in Modern Management. Chicago: Richard D. Irwin, Inc., 1950.
- Fuller, Edmund (ed.). Thesaurus of Quotations. New York: Crown Publishers, 1941.
- Heckert, J. Brooks, and Wilson, James D. Controllershship. New York: The Ronald Press Company, 1952.
- Littleton, A.C. Structure of Accounting Theory. Urbana, Illinois: American Accounting Association, 1953.
- Riegel, John W. Executive Development. Ann Arbor: University of Michigan Press, 1952.
- White, John Arch. Elementary Accounting. 3d. ed. New York: D.C. Heath & Company, 1949.

Articles

- Pierce, James L. "Controllershship and Accounting: A Contrast", The Controller, Vol. XXI, 1953.
- Welsch, Glenn A. "The Controller's Function in Top-Level Management", The Journal of Accountancy, Vol. IIc, 1954.

In addition to the Bibliography listed above, the writer relied heavily upon class notes taken during the 1954-55 Navy Graduate Comptrollership Program.

APPENDIX

INDEX

1. General Information

2. Physical Characteristics

3. Chemical Composition

4. Biological Characteristics

5. Geographical Distribution

6. Historical Background

7. Current Status

APPENDIX

1. General Information

2. Physical Characteristics

In addition to the information given above, the reader is referred to the following sources for further details: